

* Claim Number 1 *

A hinge comprising:

A hinge cup portion for mounting onto a door;

A hinge arm portion for mounting onto a cabinet;

5 Said hinge cup portion and said hinge arm portion being rotatably connected;

A spring with at least one spring arm and at least one spring coil where said
spring arm is tensioned by the spring coil, said spring being mounted substantially
outboard of said hinge cup portion, where said spring arm exerts a biasing force
on said hinge arm portion for urging said hinge to a closed position when said
10 hinge is progressed towards a closed position, and for urging said hinge arm
portion to an open position when said hinge is progressed towards an open
position;

And where the assembly of said hinge arm portion, said hinge cup portion and
said spring requires only one hinge pin.

*** Claim Number 2 ***

The hinge as in Claim Number 1, wherein the biasing force is substantially linear.

*** Claim Number 3 ***

The hinge as in Claim Number 2 wherein said spring arm is capable of exerting a first linear biasing force and a second non-linear biasing force, where said non-linear biasing force occurs at a predetermined position during the progression of
5 the hinge between an open position and a closed position.

*** Claim Number 4 ***

A hinge comprising:

A hinge arm portion affixed to a cabinet and a hinge cup portion affixed to
a door, where said hinge arm portion and hinge cup portion are rotatably
connected;

5 A spring acting between said hinge arm portion and said hinge cup portion
to provide a biased closing force or a biased opening force;

Where said biased closing force or said biased opening force is initially
applied in a substantially linear effect to the closing or opening of the
10 hinge and where said biasing forces can be selectively applied in a non-
linear effect at a predetermined position during the closing or opening of
the hinge.

*** Claim Number 5 ***

The hinge of Claim Number 4, where the hinge includes both a biased closing force and a biased opening force.

*** Claim Number 6 ***

The hinge of Claim Number 4, where the non-linear biased force may be selectively increased or decreased.

*** Claim Number 7 ***

The hinge of Claim Number 4, where said hinge arm portion and said hinge cup portion and said spring can be assembled with one hinge pin.

*** Claim Number 8 ***

A hinge comprising:

A hinge cup portion for mounting onto a door;

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A hinge arm portion for mounting onto a cabinet;

5 Said hinge cup portion and said hinge arm portion being rotatably connected;

A spring with at least one spring arm and at least one spring coil where said
spring arm is tensioned by the spring coil, said spring being mounted substantially
outboard of said hinge cup portion, where said spring arm exerts a first biasing
force on said hinge arm portion for urging said hinge to a closed position when
10 said hinge is progressed towards a closed position and for urging said hinge arm
portion to an open position when said hinge is progressed towards an open
position;

And where said spring arm exerts a second biasing force on said hinge arm
portion at a predetermined point during the progression of said hinge between an
open position and a closed position;

15 And where the assembly of said hinge arm portion, said hinge cup portion and
said spring requires only one hinge pin.

*** Claim Number 9 ***

The hinge of Claim Number 8, where said second biasing force is non-linear in effect.

*** Claim Number 10 ***

The hinge of Claim Number 9 where said second biasing force can be selectively increased or decreased in effect.

*** Claim Number 11 ***

The hinge of Claim Number 10, where said second biasing force results from interference tension asserted on said spring.

*** Claim Number 12 ***

The hinge as in Claim Number 11, where said spring arm extends through an access hole and said interference tension is directly related to the vertical clearance allowed by the access hole for the spring arm.

*** Claim Number 13 ***

A hinge comprising:

A hinge cup portion for mounting onto a door;

A hinge arm portion for mounting onto a cabinet;

5 Said hinge cup portion and said hinge arm portion being rotatably connected;

A spring with at least one spring arm and at least one spring coil where said spring arm is tensioned by the spring coil, said spring being mounted substantially outboard of said hinge cup portion, where said spring arm exerts a first biasing force on said hinge arm portion for urging said hinge to a closed position when said hinge is progressed towards a closed position, and for urging said hinge arm portion to an open position when said hinge is progressed towards an open position;

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And where said spring arm exerts a second biasing force on said hinge arm portion at a predetermined point during the progression of said hinge between an open position and a closed position and said second biasing force resulting from interference tension applied to said spring arm;

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And where the assembly of said hinge arm portion, said hinge cup portion and said spring arm requires only one hinge pin.

*** Claim Number 14 ***

A hinge as in Claim Number 13, where said interference tension is non-linear in effect.

*** Claim Number 15 ***

A hinge as in Claim Number 13, where said interference tension is selectively increasable or decreasable.

*** Claim Number 16 ***

The hinge as in Claim Number 13, where said interference tension results from contact between the spring and at least one access hole.